ORDER NO.HPD0110U00C1

Service Manual

MASSAGE LOUNGER EP1015-U1



SPECIFICATIONS

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Power source : 120V AC, 60Hz

Power consumption : 200W

Kneading speed : Approx. 28 times/min.

Tapping speed : Approx. 500 times/min.(per side)
Rolling massage speed : Approx. 1 cycle every 37 sec.

Massaging width : Shoulder/lower back section : Approx. 2-15/16 in. (75mm)

Back rolling width/tapping width : Narrow : Approx. 3-5/16 in. (85mm) / : Wide : Approx. 4-5/16 in. (110mm)

Massage heads up/down travel : Approx. 23-5/8 in. (600mm)

Regional back rolling : Automatic repetition within approx. 4-3/4 in. (120mm) range

Intensity adjustment : Adjusts massage head protrusion steplessly within approx. 1-3/4 in.(45mm) range

Shoulder position adjustment : 5 steps

Automatic shut-off : Approx. 15 min.

Dimensions (H x W x D) : ■ Not reclined and leg rest retracted : 41-11/32X34-41/64X40-35/64 in.(1050X880X1030mm)

/ Reclined and leg rest extended : 29-9/64X34-41/64X68-7/64 in.(740X880X1730mm)

Reclining angle : Approx. 123° to 160° Weight : 121 lbs. (55kg)

Accessories : Back cushion, Headrest, Cushion pad

Maximum user weight : 264lbs.(120kg).

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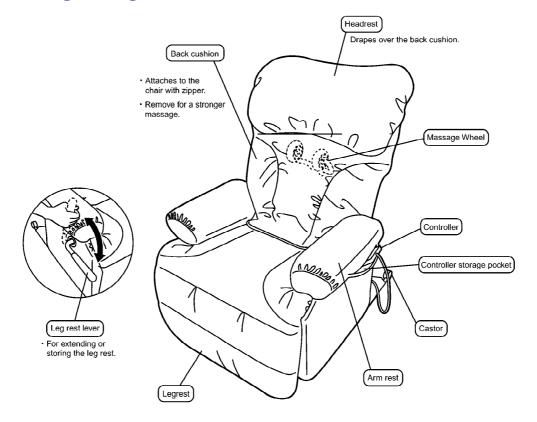
⚠ WARNING

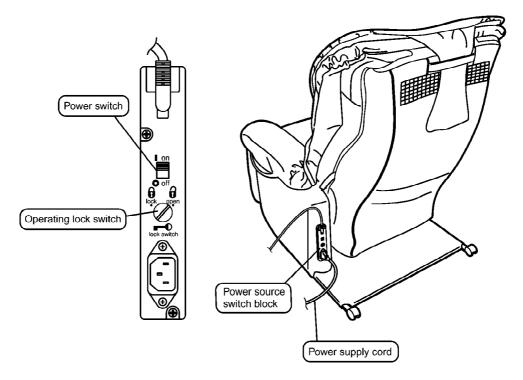
This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

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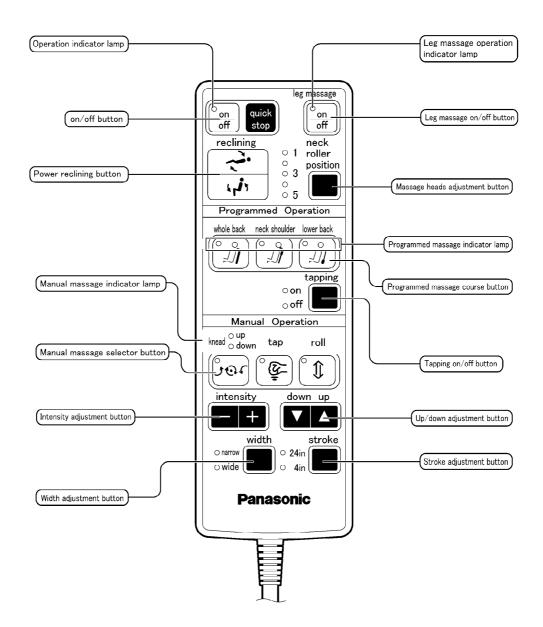
1. Components identification

1.1. Massage lounger





1.2. Controller



2. Massage range (movement range of massage wheels)

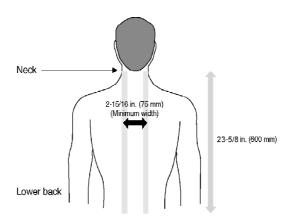
2.1. Upward massage, Downward massage, Kneading rolling, Regional kneading rolling

Width cannot be adjusted

Neck to waist: width 75mm (minimum)

Intensity adjustment

Upward and downward massage (from gentle to strong) :45mm-wide adjustability where massage heads push out toward body as intensity increases. Others (from gentle to strong) : 15mm-wide adjustability where massage heads push out toward body as intensity increases.



2.2. Tapping, Rolling, Regional rolling, Tapping rolling, Regional tapping rolling

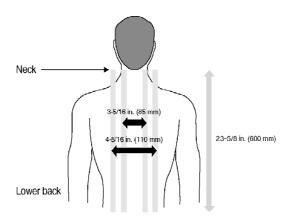
Width adjustment

Neck to waist: Massage range width: 3-5/16 in. or 4-5/16 in. (85mm or 110mm)

Intensity adjustment

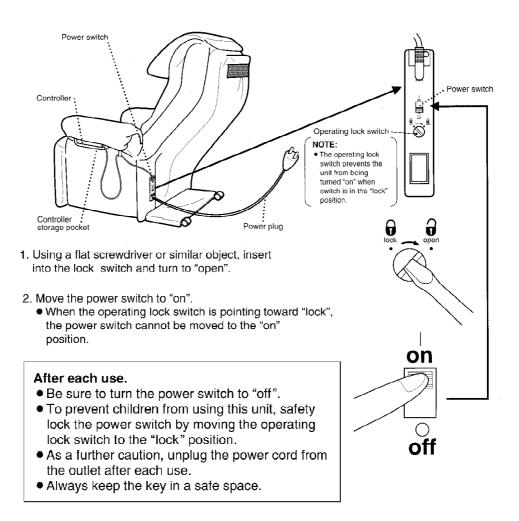
Tapping: 45mm-wide adjustability where massage heads push out toward body as intensity increases.

Others: 15mm-wide adjustability where massage heads push out toward body as intensity increases.



3. Turning on the power

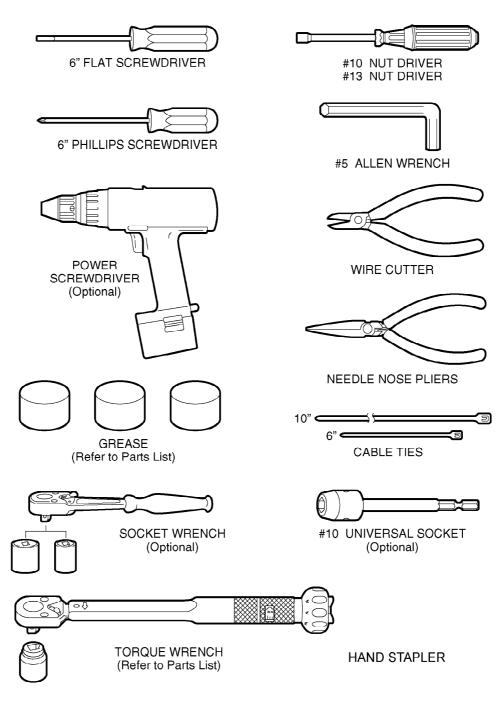
3.1. Turning on the power



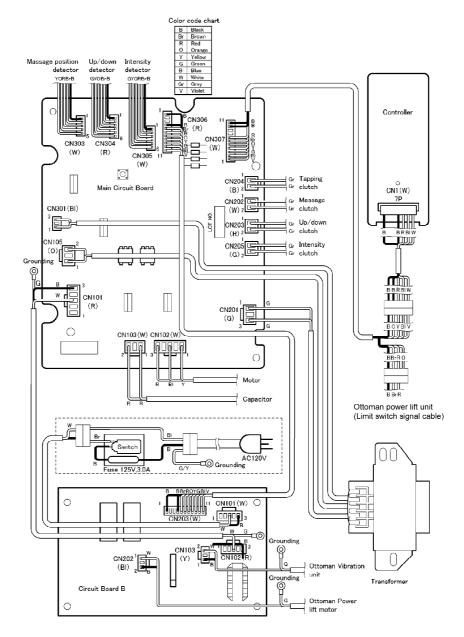
Timer

When the on/off button is pushed, a timer begins to prevent overuse. After approximately 15 minutes, time expires and the massage wheel goes into strage position.

4. Required tools



5. Actual wiring diagram



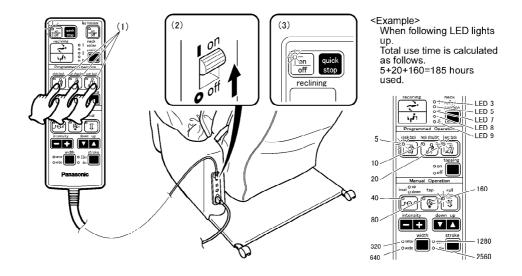
6. Display method of massage block total use time and operation time

Total use time

While pushing the whole back, neck shoulder and lower back mode programmed operation buttons simultaneously, turn on the power switch and continue to hold the buttons for approximately 5 seconds. Release after the on/off LED lights up.

*When replacing the Main Circuit PCB, the use time is counted to zero because the use time is memoried in Main Circuit PCB.

*When pushing on/off button, the operation returns to normal mode.



Display method Display it by utilizing LEDs of controller. Time display of 5 - 5115 hours possible.

To read the each operation function. After reading the total use time and push the following button, you can read the each operation funtion use time as same display method of total use time.

Chart for reading each function use time

Button operation	Funtion for reading use time	LED display for confirming function
Whole back (Programmed operation)	Upward kneading	LED 3 lights up
Neck shoulder (Programmed operation)	Downward kneading	LED 5 lights up
Lower back (Programmed operation)	Tapping	LED 7 lights up
Тар	Rolling	LED 9 lights up
Roll	Kneading and rolling	LED 3 and LED 5 light up
Down	Tapping and rolling	LED 3 and LED 7 light up
Power reclining button (Raise up)	Power reclining	LED 3 and LED 9 light up
Leg massage on/off button	Ottoman vibration	LED 5 and LED 7 light up

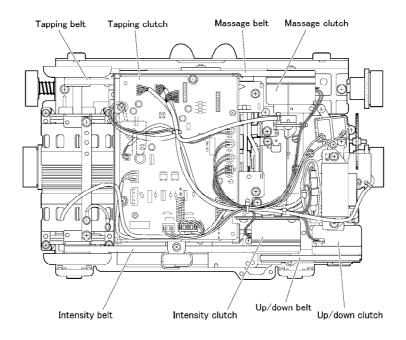
7. Motion of the clutch and belt based on various massager operations.

Massager operation and belt motion

Belt Massager operation	Intensity adjustment belt	Massage belt	Tapping belt	Up/down belt
Kneading	×	0	×	×
Kneading and rolling	×	0	×	0
Rolling	×	×	×	0
Tapping	×	×	0	×
Tapping and rolling	×	×	0	0
Width adjustment	×	0	×	×
Intensity adjustment	0	0	×	×

Massager operation and clutch motion

Clutch Massager operation	Intensity clutch	Massage clutch	Tapping clutch	Up/down clutch
Kneading	×	0	X	X
Kneading and rolling	×	0	×	0
Rolling	×	×	×	0
Tapping	×	×	0	×
Tapping and rolling	×	×	0	0
Width adjustment	×	0	×	×
Intensity adjustment	0	×	×	×



8. Massager up/down detection gear adjustment method

O: Power is transmitted to the shaft. X: Power is not transmitted to the shaft.

*Idling: Although the pulley is rotating, power is not transmitted to the shaft.

*The width can be adjusted in two steps only (except for the motions of upward and downward massaging).

When the massager is removed from the chair, the position of the up/down detection gear changes, resulting in a change of the up/down stop position.

When installing the massager on the back frame, be sure to adjust the position with the up/down detection gear.

Up/down detection gear position adjustment procedure

To make an adjustment, refer to the massager removing method (the back frame is tilted from the chair).

- 1. Before mounting, the massager on the back frame must be moved down to the lowest position by setting the controller manual operation UP/DOWN button to DOWN.
- 2. Mount the massager on the lowest position of the back frame.
- 3. Turn the hex nut M6 counterclockwise and move the massager upward.
- 4. Make sure that the massager has been mounted horizontally by moving the massager to the position shown in the Figure.
 *Unless the massager has been mounted horizontally, an abnormal sound or problem may occur.
- 5. Move it up to the highest position(until the massager stops) by setting the controller manual operation UP/DOWN button to UP.
- 6. Peeping into the square hole of the back frame, check the position of the massager to adjust.*One thread of the up/down detection gear gives a stroke change of 4mm.

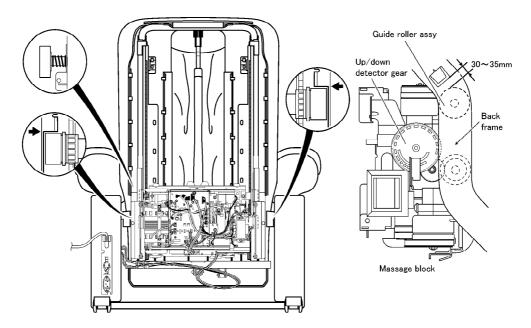
When the massager has been raised excessively: Turn the up/down detection gear clockwise to adjust.

When the massager has been lowered excessively: Turn the up/down detection gear counterclockwise to adjust.

While adjusting the distance between the square hole and Guide roller assy. to 30~35mm, check by using the up/down adjustment button found on the manual operation panel of the controller.

7. Install the rail piece A and B, and tighten uniformly the set screws (left and right, 3 pcs. each).

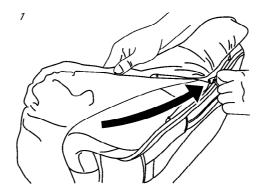
8. Using the manual operation of the controller, conduct the rolling operation. Set the massage heads adjustment switch to level 1, and check the up/down stroke.



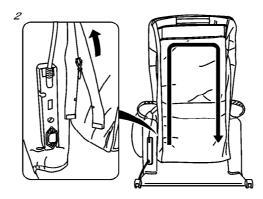
9. Removing the massage block

9.1. Removing the rear cover

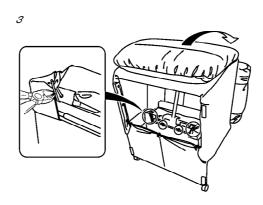
1. Unzip the back cushion zipper and remove the back / cushion.



2. Unzip the rear cover fastener from the bottom of left side.



3. Pull the chair down backward and cut insulated ties and remove the plastic clip.



9.2. Removing the massager

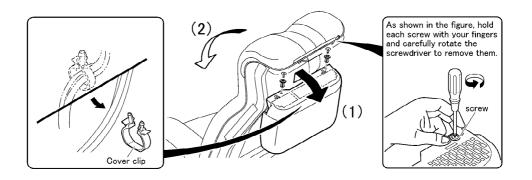
- 1. Remove the two installation screws from the massager cover, and take off the cover and remove the Cover clip.
 - *Cover clip is available to remove only after taking off the cover.
- 2. Remove two snap pins connecting Ottoman Power Lift Unit and Connecting Linkage to Back frame, and push down the seatback to the front part for easy repaire.
 - *Inspection and repair are done after placing the chair as explained in 1. and 2. above.
- 3. Remove the rail piece set screws, 3 pieces (left and right) shown in Figure, and remove the rail pieces A and B.
- 4. When the massager moves up and down (normally), move it down to the lowest position by setting the controller manual operation up/down button to "DOWN", and then turn clockwise the up/down

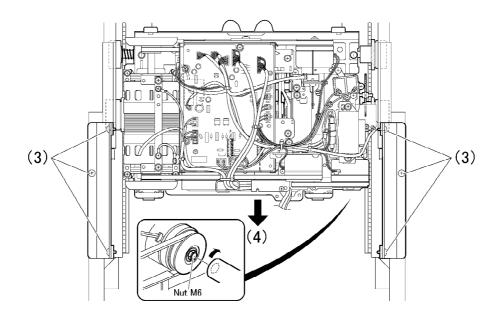
clutch hex nut M6 (see Figure) to move to the position where the Pinion A and B block is visible from the back frame.

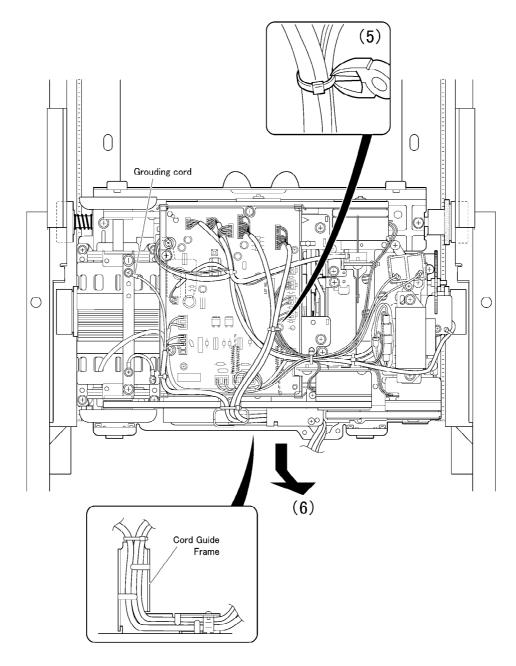
*When the massager fails to move up and down, turn clockwise the hex nut M6 of up/down clutch.

(The massager can be moved by attaching the hex socket ø10 (for nut 6 mm) to a rechargeable drill driver.)

5. Cut the cable tie as shown figure and remove the two connectors (red, white) of the connecting cord for power supply and the connecting cord for controller connected massager and unscrew the ground cord of the connecting cord for power supply, remove one screw fixing the massager side cord Fitting B and Cord wire D and remove two cords from the massager.







10. Disassembly (massager) and assembly

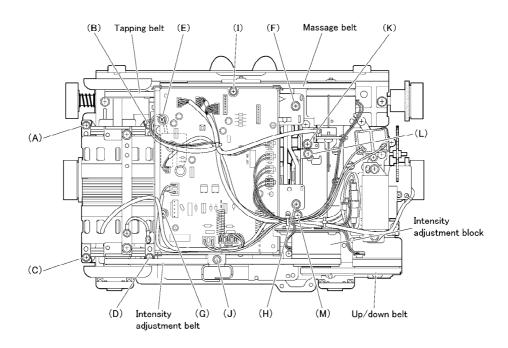
The disassembly steps 10.1 to 10.3 can be done without removing the massager from the chair (please work with the / connector cord removed).

10.1. Removing the motor

- 1. Remove the cable tie (medium), and remove the motor lead wire connector(white).
- 2. Remove the massage belt, up/down belt and intensity adjustment

belt.

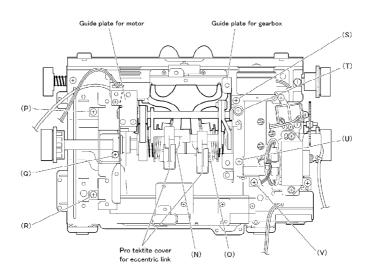
3. Remove the motor fitting set screw A to D, and remove the motor and tapping belt.

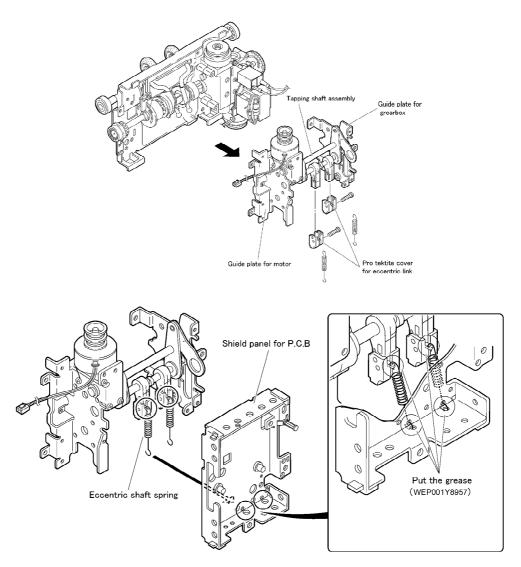


10.2. Removing the tapping shaft assembly

- 1. Cut all the insulated ties bundling each sensor and lead wires with the aid of a nipper, and remove the lead wires bundled to the wire saddles (medium, large).
- 2. Remove all the connectors to the main circuit board.
- 3. Remove the massage belt, up/down belt and intensity adjustment belt.
- 4. Remove the motor fitting set screws A to D, and remove the motor and tapping belt.
- 5. Remove the shield panel (fitted to the circuit) set screw E to J, and remove the shield panel and eccentric shaft spring.
- 6. Remove the K type stop ring by using flat head driver.
- 7. Remove the screw K to M and remove the intensity adjustment block.
- 8. Remove the Pro tektite cover for eccentric link set screws N with a spanner, and remove the Pro tektite cover for eccentric link and

- remove another screw O and the Pro tektite cover for eccentric link.
- 9. Remove the guide plate for motor set screws P to R and the guide plate for gearbox set screws S to V.
- 10. Slide out the tapping shaft assembly with tapping clutch and the guide plate for gearbox.
- *Caution for assembling the pro tektite cover for eccentric spring. <Assembly procedure>
- 1. The tapping shaft assembly should be mounted on massage mechanism, and put the grease(WEP001Y8957) on the spring setting hole of pro tektite cover for eccentric spring and set the one end of spring to hole as shown Figure.
- 2. Put the grease(WEP001Y8957) on the spring setting hole of Shield panel for PCB and set the other end of spring to hole of Shield panel for PCB.
- 3. Mount the Shield panel for PCB on massage mechanism.





10.3. Removing the gear box

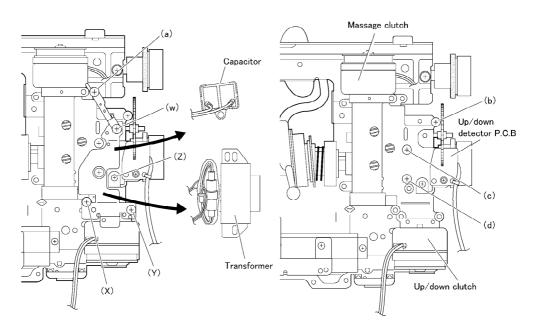
- 1. Perform removal of steps 1 to 10 of " 10.2. Removing the tapping shaft assembly ".
- 2. Remove one screw and the Capacitor.
- 3. Remove the transformer set screw, and remove the transformer and remove the base for transformer set screw W to Y and remove the base for transformer.
- 4. Remove the screw Z and Up/down detector P.C.B. Remove the gear box screws a to d.

5. After removing the screws, the massage clutch, up/down clutch and intermediate gear block can be removed.

*Take care so that the grease does not stick to the massage clutch and up/down clutch pulleys. If grease sticks, remove it with alcohol.

*The massage clutch and up/down clutch have similar shapes. The lead wires are the same gray color, so please choose based on connector color.

Massage clutch connector color: White Up/down clutch connector color: Red

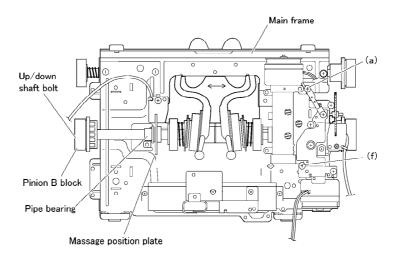


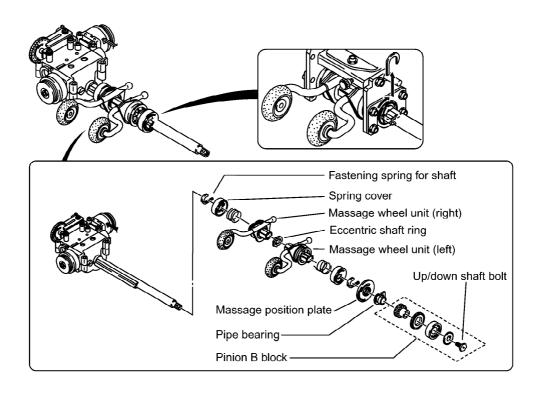
10.4. Removing the massage wheel unit set (right, left)

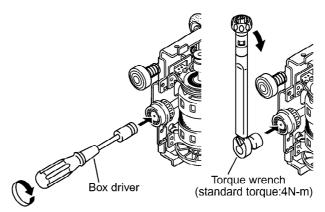
(Remove the massager from the chair before beginning the following procedure.)

- 1. Perform steps 1 to 10 in section, "10.2 Removing the tapping shaft assembly".
- 2. Remove screws a and f which connect the gear box and main frame, and remove the main frame. (When removing the main frame, turn the massage clutch hex nut so that the massage width is at its minimum.)
- 3. Remove the up/down shaft bolt of the pinion B block with the box driver, and remove the pinion B block.
- 4. Remove the pipe bearing, and remove the Massage position plate. (Take care not to break the Massage position plate.)

5. Press down the Spring cover toward gear box and keeping press and remove the Fastening spring for shaft. Remove the Spring cover, Spring, and then remove the Massage wheel unit(left), Eccentric shaft ring and the Massage wheel unit(right).



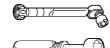




10.5. Removing and mounting the up/down shaft bolt

- *1. To remove the up/down shaft bolt, the box driver (Ø13 mm) must be used. To install, the torque wrench with Ø13 mm must be used.
- *2. The torque wrench with Ø13 mm socket and the box driver (Ø13 mm) are available as parts.

Order Parts No. Torque wrench for up/down shaft bolt : WEP000S8857



Box driver for up/down shaft : WEP000S8867

10.5.1. Removing

The pinion A and pinion B of massager block (left, right) are secured with the up/down shaft bolts.

Remove them with the box driver (Ø13 mm).

(It is possible to use the Phillips head screwdriver. But it may deform the screw head. Therefore, it is necessary to use the box driver.)

10.5.2. Mounting

• It is necessary to control the tightening torque of the up/down shaft bolt.Up/down bolt tightening torque: 4 N/m (40 kgf-cm).

*If the up/down shaft bolt has been insufficiently tightened, it may loosen when the massager moves up and down, and the massager may detach from the chair.

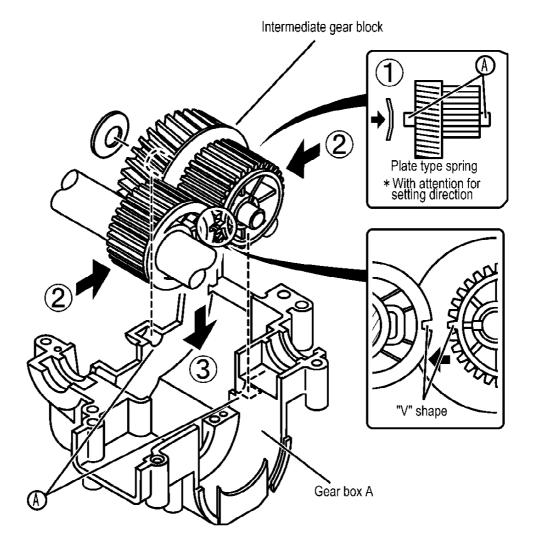
If the up/down shaft bolt has been excessively tightened, the bolt head may shear.

Tighten the up/down shaft bolt of pinion A and pinion B, while controlling the torque. 10.5.3.

- 1. .Put the grease(WEP001W8927) on the intermediate gear shaft and insert it in the center hole of the intermediate gear block. And attach the Plate type spring through the intermediate gear shaft as shown in figure.
- 2. Match the "V" shape of two ellipse gear on the intermediate gear block and drive pipe.
- 3. Assemble this block into the Gear box A as they have matched. And insert the intermediate gear shaft of intermediate gear block into the groove A of Gear box A.

^{*}Assembly instruction of an ellipse gear

^{**}When aligning two ellipse gears, smooth rotation will not be possible even if the alignment is off by just one tooth. During rotation, the gears will not match up, and may cause the massager to lock. Correct alignment of two gears required.



11. Cord arrangement of the connecting cord for power / supply and the connecting cord for controller.

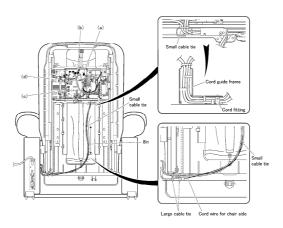
*The two types of wires are to be arranged with the massage block set in its upper most position (in respect to the chair).

- 1. Connect the two connectors, (a) and (c) to Main PCB.
- 2. Install the ground wires (d).
- 3. Fix the Cord wire for chair side on the Back frame.
- 4. Grasp white mark on the Connecting cord for power supply by large cable tie and then fix them on the Back frame.
- 5. Bind two cords with two lead wires of massage clutch and up/down sensor by using a small cable tie.

- 6. Bind seven wires of intensity clutch, up/down clutch, massage clutch, transformer, intensity sensor, up/down sensor and capacitor by using a middle cable tie.
- 7. Bind six wires of intensity clutch, up/down clutch, massage clutch, transformer, intensity sensor and up/down sensor by using a middle cable tie.
- 8. Bind four wires of massage position sensor, tapping clutch, intensity sensor and up/down sensor by using a middle cable tie.
- 9. Set three cables through the cord guide frame and set the cord fitting as shown figure.
- 10. Bind three cables at end of the cord guide frame and center of main circuit board with another two wires.
- 11. Wind three cords around the Cord wire for chair side one and half times and bind them together using a small cable tie.
- 12. Bind three cords with a small cable tie on approx. 8 in. from above binding position.

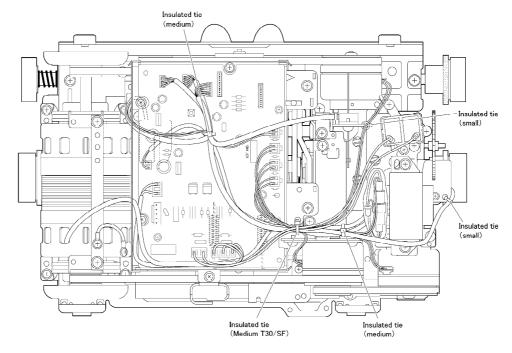
*Caution during installation.

^{*}Do not allow the cord to ride on top of the frame.



12. Arranging massage block lead wires

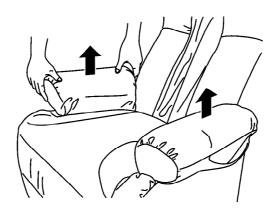
^{*}Put the massage block at its upper most point.



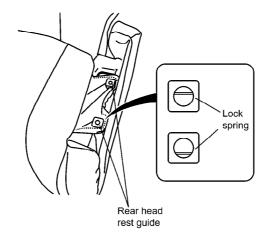
13. Disassembly instruction / (Cosmetic part and chair construction)

13.1. Seat Cushion

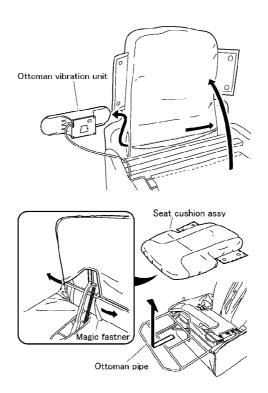
1.Pull out the right and left armrest.



2.Pull out four rear head rest guides from the right and left under pipe. / Please be careful of setting direction of the rear head rest guide as shown figure.

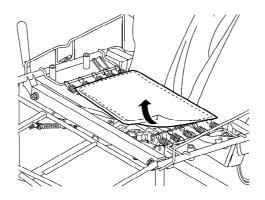


- 3.Unzip on back side of seat cushion and take out the ottoman vibration unit.
- 4.Detach the magic fastener on back side of ottoman.
- 5.Remove the seat cushion assy. from the ottoman pipe.

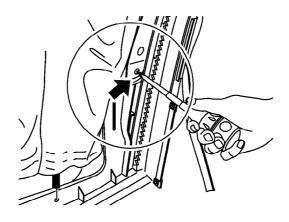


13.2. Massage Wheel Cover

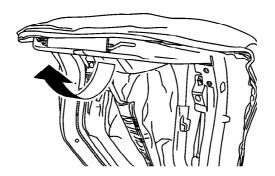
1.Detach the plastic clip on safety flap from matte.



2.Remove eight screws connecting massage wheel cover and back frame.

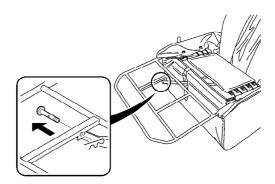


3.Detach the plastic clip on top of back frame.

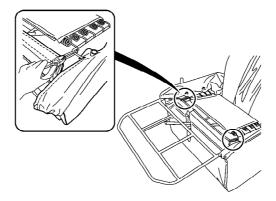


13.3. Under Cover

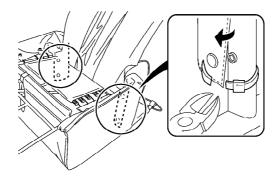
- *Prior to disassemble, removal of the reclining lever and the power source switch block required.
- 1.Pull out the snap pin and take out the link support pin.
- 2.Cut two insulated ties connecting the under cover and the right and left under pipe.
- 3.Cut the insulated tie as shown figure.



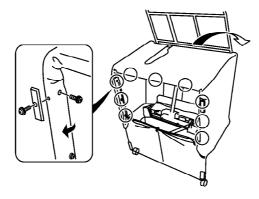
4.Remove nine screws fixing the under cover to the right and left under pipe.And remove two screws from the floor guide and take out the floor guides.



5.Remove staples connecting the under cover to the blow cushion left at inside of the power source switch block.

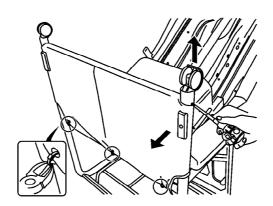


6.Unhook the under cover and remove the under cover.

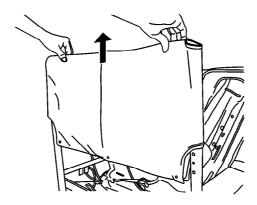


13.4. Caster Pipe Cover

1.Remove two screws connecting the caster with the right and left under pipe, and take off two casters.Cut three insulated ties, and remove two floor guides.



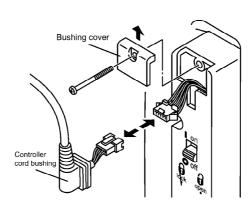
2.Pull out the caster cover.



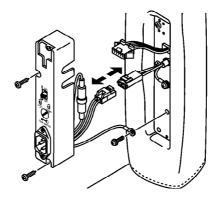
13.5. Power Source Switch Block

1.Remove the bushing cover, and pull out the controller cord bushing, and then take off the connector.

*In this stage, it is possible to take off the controller block from the chair.

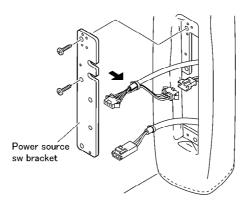


2.Remove two screws and pull out the power source switch block.Take off the connector of power supply and remove screw connecting the grounding lead wire.



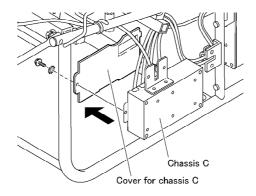
3.Remove screws and pull out the power source sw bracket.

*If required to replace the fuse, after second step, pull out the fuse holder and replace the fuse inside.



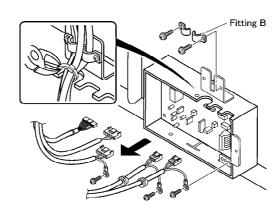
13.6. Circuit Board B

1.Remove a screw on cover for chassis C.

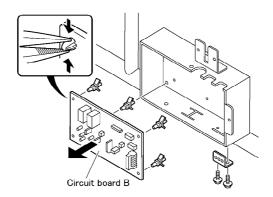


2.Cut the calbe tie and remove two screws of fitting B.

Remove three screws of grounding wires. Remove all connectors on circuit board B.

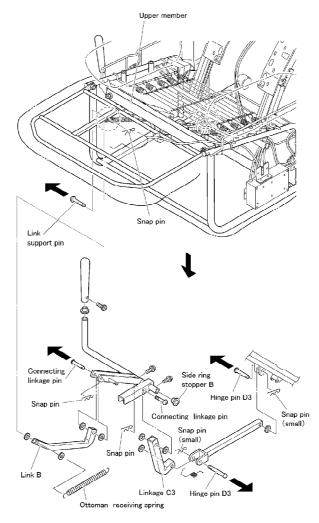


3. Take out the circuit board B as shown figure.



13.7. Ottoman Lever and Link B

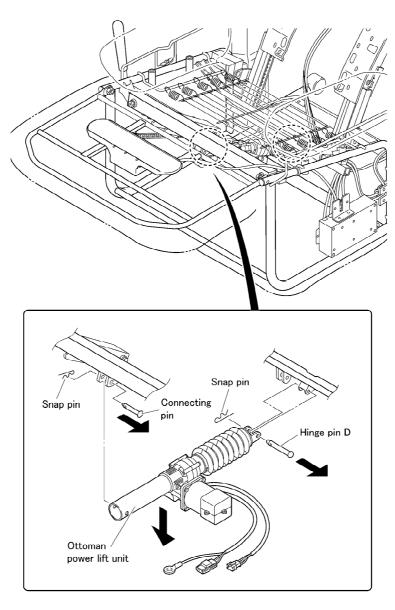
- 1.Remove the ottoman receiving spring.
- 2.Remove two snap pins and take off the link support pin and connecting linkage pin and then remove the link B.
- 3. Remove a snap pin set on connecting linkage pin and take off linkage C3.
- 4.Remove a screw on ottoman lever and slide the side ring stopper B toward inside.
- 5.Remove the ottoman lever from the bracket on the upper member.



13.8. Ottoman Power Lift Unit

- 1.Remove the connectors of ottoman power lift unit on the circuit board B.
- 2.Remove two snap pins and take off the hinge pin D and connecting pin.
- 3.Remove the ottoman power lift unit.

^{*}Be careful that the back frame will fall down when removing the ottoman power lift unit. When disassembling, hold the back frame for safety and preventing from any damage of the back frame.



14. Other

14.1. Grease use

Please grease during each repair.

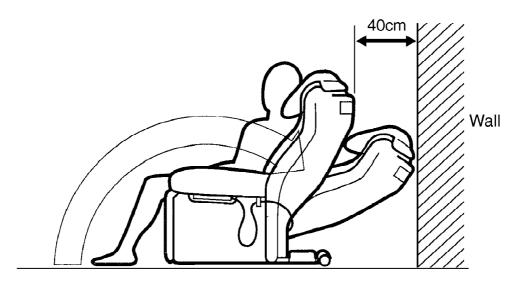
Acceptable Grease

- Alvania RA (light brown)
- Molycoat (white)
- E paste (yellow)
- YM103 (yellow)
- EM-D110 (yellow)

Ref. number	Parts name	Grease	Part No.
40,69	Up/down gear, up/down worm wheel	Alvania RA	WEPGP1
1, 4 Guide roller F, coupling bar		Alvania NA	WERGET
45	Intermediate gear shaft		
37	Drive pipe		
47	Up/down shaft	Molycoat	WEP001W8927
12,42	Guide rollers A and B		
134	Back frame		
82,68	Tapping & massage clutch worm shaft]	WEDODE
44,45	Intermediate gear E paste		WEPGP5
37	Drive pipe (ellipse gear)	1	
20,22	Arm steel globe section		
31 Intensity adjustment unit		YM103	WEP001Y8957
28,51	Shield panel for PCB, Pro tektite cover for eccentric link		
58	Tapping shaft	EM-D110	WEP001Y8967

14.2. Examination after inspection and repairing

- Check all operations with the massage block operation test switch.
- Check that the massage block operates using the controller.
- Check that the massage block operates loaded (i.e. sit in the chair and check).
- Upon finishing repairs, when placing the chair, make sure that it has enough space to fully recline. There should be more than 40cm between the wall and the chair when in the upright position.



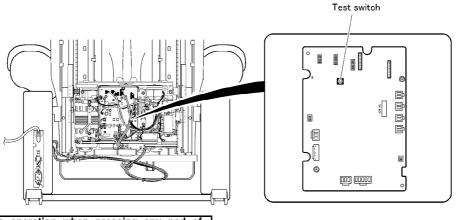
14.3. Q&A

	Q	Α
1	When operating the chair, there are various strange noises. Is the chair broken?	The massage lounger does several massage functions such as kneading, rolling and tapping. The built-in massager block 10kg makes various sounds, none of which mean there is a problem. These sounds come from the normal mechanical operation. Please check and understand the Operation Manual so that these various sounds can be explained.
2	The demo chair I tried before buying did not make strange noises.	• In the case of the demo chair, the noise from the surrounding area in the store was loud enough to prevent you from hearing the normal noises from the chair. At home, the noises are more noticeable as the surrounding area is quite.
3	The massage wheels stop in the middle of operation. Or, the massager block stops and all the controller lamps begin to blink.	 So that the massager block can move freely up and down, confirm that there are no obstacles in the rear of the chair, including the wall. Also, if the massage wheels encounter a strong counter force, they are designed to stop. The motion of the massage wheels (drive pipe rotation) is checked by the micro computer. If the signal of the drive pipe rotation stops for more than 5 seconds, all the LED on the controller will blink and the massager block with stop. If the massage wheels stop, and all the lamps on the controller begin to blink, push the ON/OFF button to restart the controller. A load of more than120kg should be avoided, as the massager block is designed to stop automatically when overloaded.

14.4. Instructions for trouble shooting in response to a customer's claim.

	Customer's claim	Remedy
1	A squeaking sound between the drive pipe and the up/down shaft due to overload stress.	Apply the Molycoat grease to the up/down shaft.
2	A squeaking sound caused by the massage wheel and massage wheel cover rubbing against one another.	Apply silicon spray oil to the whole back of the massage wheel cover. Apply silicon oil to the massage wheel surface with a cloth soaked in silicon oil. (If oil is sprayed directly to the massage wheel, it may cause the massage wheel to not work properly.)
3	A squeaking sound from the gears inside the gear box due to a lack of grease.	Apply the E-paste grease to the inside of the gear box.
4	A discrepancy in the position of the massage wheel up/down and front/rear. Massage Wheel(Fight) Drive Pipe (for Kneeling) Tapping Shaft (for Tapping) View from A Offset 30mm Max. 10mm	The massage block has two main functions, kneading and tapping. These functions are operated by a linkage mechanism and are switched by an electrical clutch system. The tapping function is operated by the rotation of the tapping shaft. This tapping shaft is offset by approximately 30mm on the left and right massage wheels. This tapping shaft will stop at a random position when the massage is functioning. Because of this, the positions of the left and right massage wheels have a maximum discrepancy of 10mm up/down and front/rear. This is normal, and there is no need to be concerned.

15. Trouble shooting



No operation when pressing any pad of controller.

Check the massage block operation.

Press the test switch of the main circuit board, and check the massage block operation.

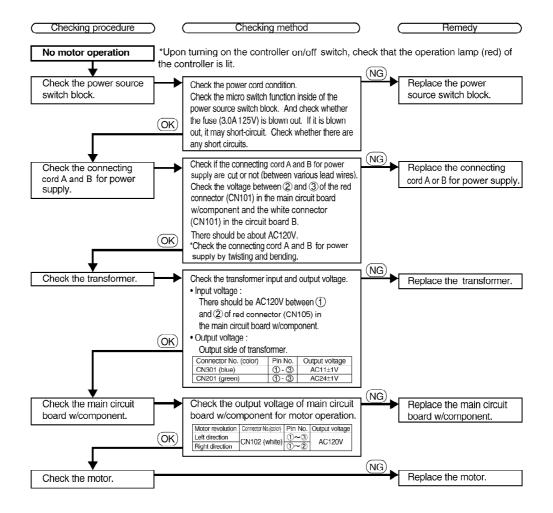
- Operation test method
- 1. Turn on the on/off switch.
- 2. Press the stop switch to turn off.
- 3. Press the test switch for more than 1 second.
- Caution

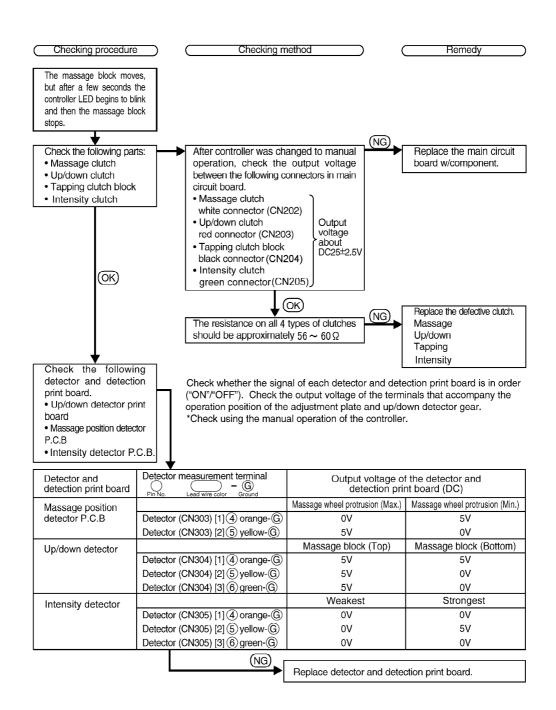
When returning to normal operation, turn off the power switch and check that the controller lamp turned off.
Then turn the power switch on again.

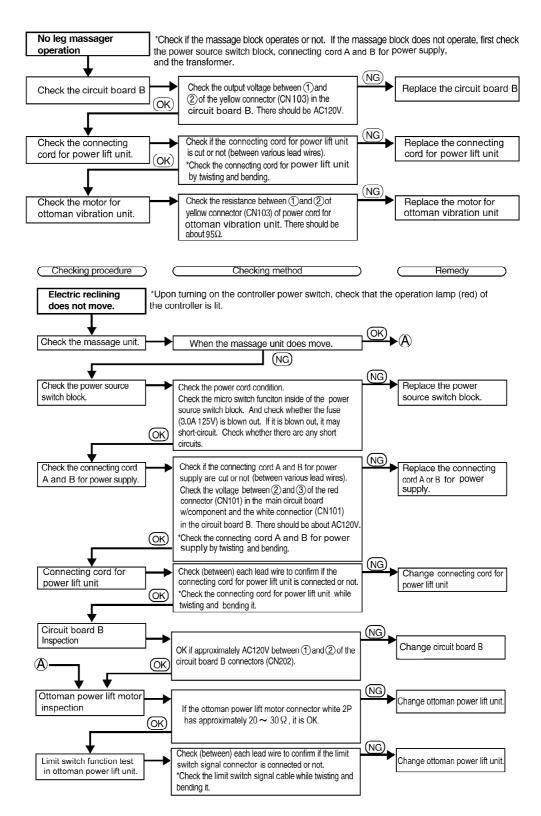
- Contents of test operation
- (1)Move the massage block up to highest position under weak, narrow and rolling mode.
- (2)Move the massage block down to the center of the up/down stroke under wide and rolling mode.
- (3)Massage upward 3 times.
- (4)Move the massage block down to the lowest position under wide and tapping rolling mode.
- (5)Move the massage block up to the selected shoulder position under massage rolling mode.
- (6)Operate the intensity from weak to strong and massage downward 3 times. Then operate the intensity to weak.
- (7)Move the massage block up to the highest position under narrow and rolling mode
- (8)Move to reset position.
- *Reset position means that the massage wheel stops at weakest and widest position.



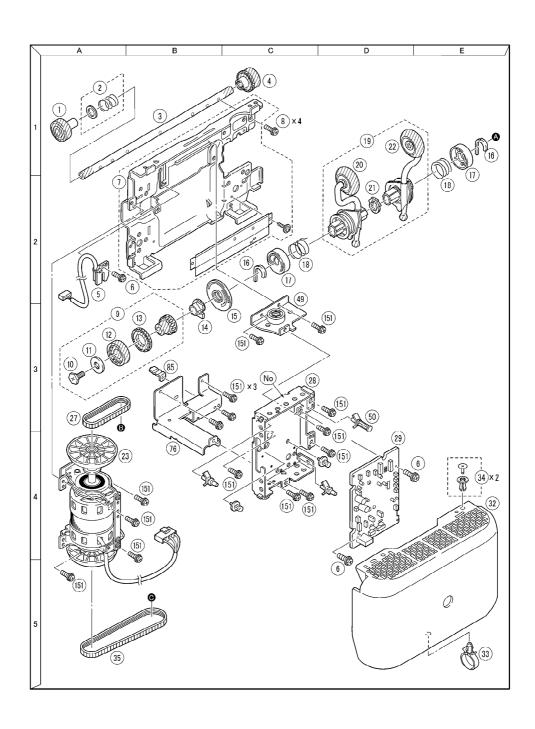
- If a problem remains even after completing all operations, it is possible that the problem is with the connecting cord for the controller (disconnected), controller cord (disconnected), or with the controller itself.
- In the case of a problem with one of the clutches or detectors, if during operations (1)~(8), if one operation continues and does not move on to the next operation, in the case of a operation other than kneading, the operation will exceed its limit and will lock. Check parts related to the operation in which the lock occurred, or in the proceeding operation. In the case of locking during kneading, the locked state will repeat.

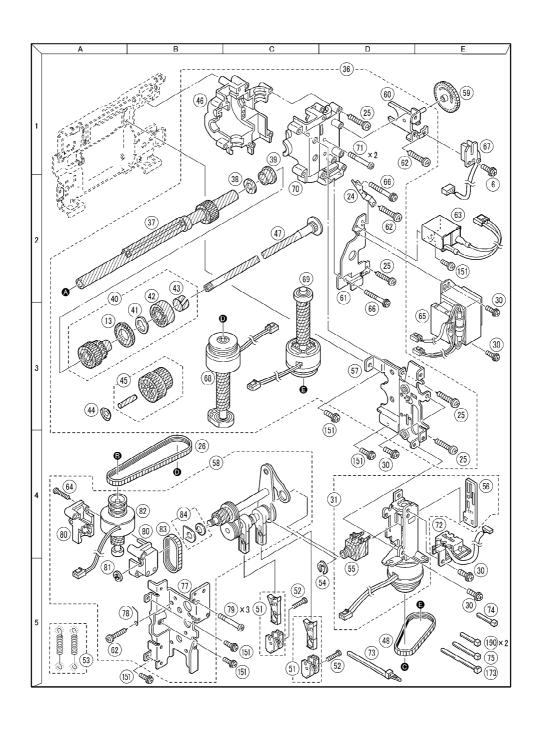


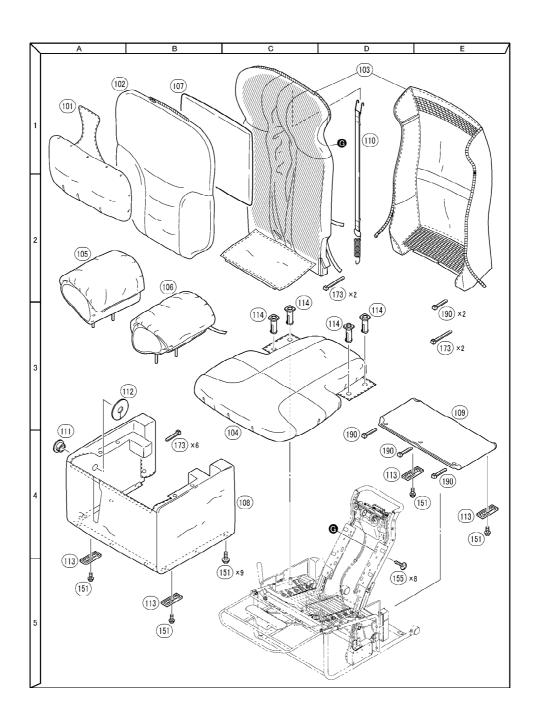


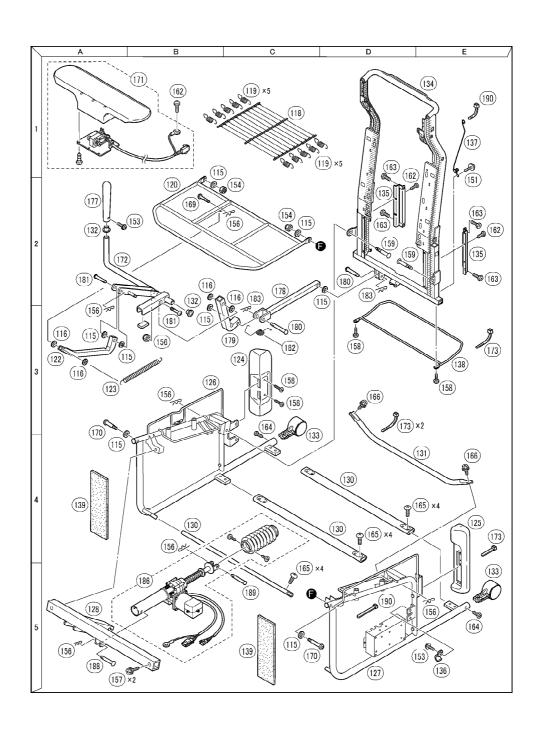


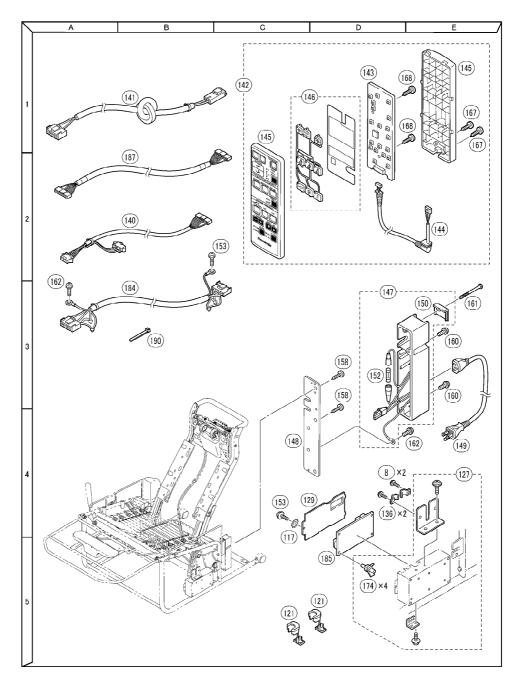
16. Exploded view











17. Replacement parts list for EP1015-U1

NOTES:

RMKS:*1Available individually

Ref.No	Part No.	Part Name & Description	Rer	marks	Per Unit
1	WEP573L1967	GUIDE ROLLER G			1
2	WEP750L0167	GUIDE ROLLER SPRING SET			1
3	WEP596L0287	COUPLING BAR			1
4	WEP760L0157	GUIDE ROLLER ASSY.			1
5	WEP776L4957	MASSAGE POSITION DETECTOR P.C.B			1
6	WEP2000L9777	SCREW(Cup.S.K3-8)	*1		4
7	WEP579L0558	MAIN FRAME	-		1
8	WEP2000L9557	SCREW(Cup.S.M4-16)	*1		6
9	WEP2000L1447	PINION B BLOCK			1
10	WEP596L6057	UP/DOWN SHAFT BOLT			1
11	WEP596L3538	FITTING			1
12	WEP545H1937	GUIDE ROLLER B			1
13	WEP578AL0317	RUBBER RING	*1		2
14	WEP596L0328	PIPE			1
15	WEP1015L0458	MASSAGE POSITION PLATE			1
16	WEP578L0167	FASTENING SPRING FOR SHAFT	*1		2
17	WEP578L0387	SPRING COVER	*1		2
18	WEP578L0197	SPRING	*1		2
19	WEP755L1187	MASSAGE WHEEL UNIT SET			1
20	WEP755L1177	MASSAGE WHEEL UNIT (LEFT)			1
21	WEP596L0637	ECCENTRIC SHAFT RING			1
22	WEP755L1167	MASSAGE WHEEL UNIT (RIGHT)			1
23	WEP1015L1008	MOTOR			1
24	WEP1015L0178	GROUNDING PLATE			1
25			*1		5
	WEP596L9648	SCREW(TP.BH4-38P) MASSAGE BELT	<u> </u>		-
<u>26</u>	WEP596L1097				1
27	WEP596L1117	TAPPING BELT			1
28	WEP1800L0037	SHIELD PANEL FOR P.C.B			1
<u>29</u>	WEP1015L2108	MAIN CIRCUIT BOARD W/COMPONENT	*4		1
30	WEP573L6627	SCREW(Cup.S.4-6)	*1		5
<u>31</u>	WEP755L0508	INTENSITY ADJUSTMENT UNIT			1
32	WEP790L0529	MASSAGE MECHANISM COVER			1
33	WEP1010L0598	COVER CLIP	**		1
34	WEP596K0457	SCREW	*1		2
<u>35</u>	WEP596L1128	INTENSITY ADJUSTMENT BELT			1
<u>36</u>	WEP1015L4058	DRIVE PIPE ASSEMBLY			1
<u>37</u>	WEP2000L4357	DRIVE PIPE			1
38	WEP2010L5217	POLY SLIDER RING			1
<u>39</u>	WEP2010L5527	FITTING B			1
40	WEP2000L1467	UP/DOWN GEAR			1
41	WEP578AL1907	UP/DOWN SHAFT SPRING			1
42	WEP545H1917	GUIDE ROLLER A			1
43	WEP750L0837	SPACER FOR GUIDE ROLLER			1
44	WEP760L0147	PLATE TYPE SPRING			1
<u>45</u>	WEP2000L4637	INTERMEDIATE GEAR BLOCK			1
<u>46</u>	WEP760L1767	GEAR BOX A			1
<u>47</u>	WEP2000L0377	UP/DOWN SHAFT			1
<u>48</u>	WEP596L3417	UP/DOWN BELT			1
<u>49</u>	WEP578AL1307	IDLER PULLEY BLOCK			1
<u>50</u>	WEP1800L1657	CIRCUIT BOARD SPACER			1
<u>51</u>	WEP750L0207	PRO TEKTITE COVER FOR ECCENTRIC LINK	*1		2
<u>52</u>	WEP596L6328	SCREW(6ANGLE.S.K4-22)	*1		2
<u>53</u>	WEP1015L0197	ECCENTRIC SHAFT SPRING	*1		2
<u>54</u>	WEP596L6887	K TYPE RING STOPPER			1

Ref.No	Part No.	Part Name & Description		Remarks	Per Unit
<u>55</u>	WEP569L0577	INTENSITY NUT CASE			1
<u>56</u>	WEP755L0467	INTENSITY ADJUSTMENT PLATE			1
<u>57</u>	WEP596L0218	GUIDE PLATE FOR GEAR BOX			1
<u>58</u>	WEP1015L4348	TAPPING LINK BLOCK			1
59	WEP569L1397	UP/DOWN DETECTOR GEAR A			1
<u>60</u>	WEP2000L1847	UP/DOWN DETECTOR PLATE			1
61	WEP578L0288	BASE FOR TRANSFORMER			1
62	WEP596L9137	SCREW(TP.K4-14)	*1		2
63	WEP1022L2388	CAPACITOR			1
64	WEP755L9537	SCREW(BIND.TP.B3-20)			1
<u>65</u>	WEP790L2230	TRANSFORMER			1
<u>66</u>	WEP760L9677	SCREW(BAINDB4-51)	*1		2
<u>67</u>	WEP776L2187	UP/DOWN DETECTOR P.C.B			1
<u>68</u>	WEP579L4830	MASSAGE CLUTCH			1
69	WEP579L4840	UP/DOWN CLUTCH			1
70	WEP760L1797	GEAR BOX B			1
71	WEP589L6997	SCREW(TP.BH4-60)	*1		2
72	WEP776L4957	INTENSITY ADJUSTMENT			1
73	WEP005W8537	INSULATED TIE (MEDIUM T30/SF)			1
74	WEP004W8507	INSULATED TIE (SMALL)			1
75	WEP004W8517	INSULATED TIE (MEDIUM)			1
76	WEP589L0218	CORD GUIDE FRAME			1
77	WEP596L0237	GUIDE PLATE FOR MOTOR			1
78	WEP596L0187	GROUND SPRING C			1
<u></u> 79	WEP596L6087	SCREW (BIND.TP.B4-48)	*1		3
80	WEP596L1778	TAPPING GEAR BOX AB SET	-		1
81	WEP569L6857	E TYPE STOP RING			1
82	WEP579L1490	TAPPING CLUTCH			1
83	WEP569L1147	TAPPING BELT A			1
84	WEP596L5197	PLATE FOR TAPPING GEAR BOX			1
85	WEP755L0218	CORD FITTING			1
101	WEP1015K3678	HEAD REST ASSY, BLACK		Aromat	1
101	WEP1015B3678	HEAD REST ASSY. BROWN		Aromat	1
101	WEP1015G3678	HEAD REST ASSY. GREEN		Aromat	1
101	WEP1015T3678	HEAD REST ASSY, TAN		Aromat	1
101	WEP101513078	HEAD REST ASSY. NAVY BLUE		Aromat	1
102	WEP1015K3618	BACK REST CUSHION ASSY. BLACK		Aromat	1
102	WEP1015B3618	BACK REST CUSHION ASSY. BROWN		Aromat	1
		BACK REST CUSHION ASSY, GREEN			1
102	WEP1015G3618 WEP1015T3618	BACK REST CUSHION ASSY. GREEN BACK REST CUSHION ASSY. TAN		Aromat	1
		BACK REST CUSHION ASSY. TAN BACK REST CUSHION ASSY. NAVY BLUE		Aromat	1
102	WEP1015N3618			Aromat	
103	WEP1015K3148	MASSAGE WHEEL & REAR COVER BLACK		Aromat	1
103	WEP1015B3148	MASSAGE WHEEL & REAR COVER BROWN		Aromat	1
103	WEP1015G3148	MASSAGE WHEEL & REAR COVER GREEN		Aromat	1
103	WEP1015T3148	MASSAGE WHEEL & REAR COVER NAVY BLUE		Aromat	1
103	WEP1015N3148	MASSAGE WHEEL & REAR COVER NAVY BLUE		Aromat	1
104	WEP1015K3688	SEAT CUSHION ASSY. BLACK		Aromat	1
104	WEP1015B3688	SEAT CUSHION ASSY. BROWN		Aromat	1
104	WEP1015G3689	SEAT CUSHION ASSY. GREEN		Aromat	1
104	WEP1015T3690	SEAT CUSHION ASSY. TAN		Aromat	1
104	WEP1015N3691	SEAT CUSHION ASSY. NAVY BLUE		Aromat	1
<u>105</u>	WEP1015K3708	RIGHT ARM REST (BLACK)		Aromat	1
105	WEP1015B3708	RIGHT ARM REST (BROWN)		Aromat	1
105	WEP1015G3708	RIGHT ARM REST (GREEN)		Aromat	1

Ref.No	Part No.	Part Name & Description		Remarks	Per Unit
105	WEP1015T3708	RIGHT ARM REST (TAN)		Aromat	1
105	WEP1015N3708	RIGHT ARM REST (NAVY BLUE)		Aromat	1
<u>106</u>	WEP1015K3698	LEFT ARM REST (BLACK)		Aromat	1
106	WEP1015B3698	LEFT ARM REST (BROWN)		Aromat	1
106	WEP1015G3698	LEFT ARM REST (GREEN)		Aromat	1
106	WEP1015T3698	LEFT ARM REST (TAN)		Aromat	1
106	WEP1015N3698	LEFT ARM REST (NAVY BLUE)		Aromat	1
107	WEP1015K3638	CUSHION PAD (BLACK)		Aromat	1
107	WEP1015B3638	CUSHION PAD (BROWN)		Aromat	1
107	WEP1015G3638	CUSHION PAD (GREEN)		Aromat	1
107	WEP1015T3638	CUSHION PAD (TAN)		Aromat	1
107	WEP1015N3638	CUSHION PAD (NAVY BLUE)		Aromat	1
108	WEP1015K3788	UNDER COVER (BLACK)		Aromat	1
108	WEP1015B3788	UNDER COVER (BROWN)		Aromat	1
108	WEP1015G3788	UNDER COVER (GREEN)		Aromat	1
108	WEP1015T3788	UNDER COVER (TAN)		Aromat	1
108	WEP1015N3788	UNDER COVER (NAVY BLUE)		Aromat	1
109	WEP1015K3798	CASTER PIPE COVER (BLACK)		Aromat	1
109	WEP1015B3798	CASTER PIPE COVER (BROWN)		Aromat	1
109	WEP1015G3798	CASTER PIPE COVER (GREEN)		Aromat	1
109	WEP1015T3798	CASTER PIPE COVER (TAN)		Aromat	1
109	WEP1015N3798	CASTER PIPE COVER (NAVY BLUE)		Aromat	1
110	WEP1022L0858	CENTER BELT		7.1.0.11.0.1	1
111	WEP1015K3458	LEVER CAP			1
112	WEP1010L1898	LEVER CAP CATCHER			1
113	WEP1010K3378	FLOOR GUIDE	*1		4
114	WEP1010K0898	REAR HEAD REST GUIDE	*1		4
115	WEP596L6997	POLYETHYLENE WASHER	*1		8
116	WEP757L6987	POLYETHYLENE WASHER	*1		4
117	WEP1015L6508	SERRATED WASHER	<u>'</u>		1
118	WEP1013L0308	MATTE		Aromat	1
		COIL SPRING	*1	Aromat	10
<u>119</u>	WEP1010L0918		'		
120	WEP1015L1248	OTTOMAN PIPE	*4		1
121	WEP1015L3468	CORD BUSHING	*1		2
122	WEP1022K4988	LINK B			1
123	WEP1022L0918	OTTOMAN RECEIVING SPRING			1
124	WEP1022L0008	BLOW CUSHION RIGHT			1
125	WEP1022L0018	BLOW CUSHION LEFT			1
126	WEP1022L0098	UNDER PIPE RIGHT			1
<u>127</u>	WEP1015L0099	UNDER PIPE LEFT			1
<u>128</u>	WEP1015L0048	UPPER MEMBER			1
<u>129</u>	WEP760K3747	COVER FOR CHASIS C			1
<u>130</u>	WEP1022L0038	FRONT LOWER MEMBER	*1		3
<u>131</u>	WEP1010K0068	UPPER MEMBER B			1
<u>132</u>	WEP780S0397	SIDE RING STOPPER B	*1		2
<u>133</u>	WEP594K3907	CASTER	*1		2
<u>134</u>	WEP1015L0088	BACK FRAME	1		1
<u>135</u>	WEP2000L0767	RAIL PIECE	*1		2
<u>136</u>	WEP578L0218	FITTING B	*1		3
<u>137</u>	WEP1800L0687	CORD WIRE FOR CHAIR SIDE			1
<u>138</u>	WEP1015L3048	BACK WIRE B			1
<u>139</u>	WEP1022L0318	FRONT MEMBER CUSHION	*1	Aromat	2
<u>140</u>	WEP1015L2928	CONNECTING CORD FOR CONTROLLER			1
141	WEP1015L2898	CONNECTING CORD A FOR POWER SUPPLY			1

Ref.No	Part No.	Part Name & Description		Remarks	Per Unit
142	WEP1015K4458	CONTROLLER BLOCK			1
143	WEP1015L2118	CONTROLLER PCB			1
144	WEP1022K2068	CONTROLLER CORD			1
145	WEP1015K3078	CONTROLLER HOUSING SET			1
146	WEP1015K3258	CONTROLLER SWITCH BUTTON			1
147	WEP1015K2008	POWER SOURCE SWITCH BLOCK			1
148	WEP1010L0448	POWER SOURCE SW BRACKET			1
149	WEP790K2060	POWER CORD			1
150	WEP578K0778	BUSHING COVER			1
151	WEP752L6337	HEX SCREW M4X10	*1		35
152	WEP1010L5298	FUSE (125V, 3A)			1
153	WEP596K6627	SCREW M4X6	*1		4
154	WEP755K6488	SUPER LOCK NUT M6	*1		2
155	WEP755L9687	SCREW M4X16	*1		8
156	WEP50380357	SNAP PIN	*1		7
157	WEP1015L6058	BOLT WASHER	*1		2
158	WEP1010K9008	SCREW M5X12	*1	Aromat	6
159	WEP760L0907	HINGE PIN A	*1		2
160	WEP1010L9118	SCREW M3X12	*1		2
161	WEP1010K9078	SCREW M3X40	<u> </u>	Aromat	1
162	WEP1010L9098	SCREW M4X8	*1	Aromat	5
163	WEP1010L9058	HEX SCREW K4X6	*1	Aromat	4
164	WEP1010L9038	SCREW K5X16	*1	7 i omat	2
165	WEP578N6227	SCREW M6X10	*1		12
166	WEP1010L6558	HEX BOLT M6X12	*1		2
167	WEP569K9047	TAPPING SCREW K3-10	*1		2
168	WEP755L9107	SCREW K2-6	*1		2
169	WEP753L9107 WEP752H0867	LINK SUPPORT PIN	<u>'</u>		1
		HINGE PIN D	*1		2
<u>170</u>	WEP752H0877	OTTOMAN VIBRATION UNIT	1		
171	WEP1015L1068				1
172	WEP1015L0048	OTTOMAN DRIVER PIPE	+4		1
<u>173</u>	WEP004W8507	CABLE TIE L-8	*1		15
<u>174</u>	WEP2000L0537	CIRCUIT BOARD SPACER	*1		4
175	WEP001Y8967	GREASE (EMD110)			
176	WEPGP1	GREASE (SHELL RA)			_
<u>177</u>	WEP1015K3208	OTTOMAN LEVER BLACK			1
<u>178</u>	WEP1015L0808	CONNECTING LINKAGE			1
<u>179</u>	WEP1015L0888	LINKAGE C3			1
180	WEP1800L0917	HINGE PIN D3	*1		2
<u>181</u>	WEP1015L6808	CONNECTING LINKAGE PIN	*1		2
<u>182</u>	WEP1015L0918	SPRING	<u> </u>		1
<u>183</u>	WEP760L0347	SNAP PIN SSP-6	*1		2
<u>184</u>	WEP1015L2908	CONNECTING CORD B FOR POWER SUPPLY			1
<u>185</u>	WEP1015L2118	CIRCUIT BOARD B			1
<u>186</u>	WEP1015L4108	OTTOMAN POWER LIFT UNIT			1
<u>187</u>	WEP1015L2918	CONNECTING CORD FOR POWER LIFT UNIT			1
<u>188</u>	WEP2005L0357	CONNECTING PIN			1
<u>189</u>	WEP2000L0937	HINGE PIN D			1
<u>190</u>	WEP1015L8508	CABLE TIE PLT1M-M	*1		10
	WEP1015L8100	OPERATING INSTRUCTION		Aromat	1
	WEP1015K8008	INDIVIDUAL PACKAGE (BLACK)		Aromat	1
	WEP1015B8008	INDIVIDUAL PACKAGE (BROWN)		Aromat	1
	WEP1015G8008	INDIVIDUAL PACKAGE (GREEN)		Aromat	1
	WEP1015T8008	INDIVIDUAL PACKAGE (TAN)		Aromat	1

Ref.No	Part No.	Part Name & Description	Remarks	Per Unit
	WEP1015N8008	INDIVIDUAL PACKAGE (NAVY BLUE)	Aromat	1
	WEP000S8857	TORQUE WRENCH		
	WEP000S8867	BOX DRIVER		